

1. *Chlorophyll a* (Chl *a*) is the primary photosynthetic pigment in most plants and algae. It is a green pigment that absorbs light energy in the blue and red regions of the visible spectrum.

2. *Chlorophyll b* (Chl *b*) is an accessory pigment found in green plants and algae. It absorbs light energy in the blue and orange-red regions of the visible spectrum.

3. *Carotenoids* are a group of pigments that include carotenes and xanthophylls. They absorb light energy in the blue and green regions of the visible spectrum.

4. *Xanthophylls* are a group of pigments that include lutein, zeaxanthin, and antheraxanthin. They absorb light energy in the blue and green regions of the visible spectrum.

5. *Lutein* is a xanthophyll pigment that is found in many plants and algae. It absorbs light energy in the blue and green regions of the visible spectrum.

6. *Zeaxanthin* is a xanthophyll pigment that is found in many plants and algae. It absorbs light energy in the blue and green regions of the visible spectrum.

7. *Antheraxanthin* is a xanthophyll pigment that is found in many plants and algae. It absorbs light energy in the blue and green regions of the visible spectrum.

8. *Anthocyanins* are a group of pigments that include cyanidin, delphinidin, and pelargonidin. They absorb light energy in the blue and green regions of the visible spectrum.

9. *Cyanidin* is an anthocyanin pigment that is found in many plants and algae. It absorbs light energy in the blue and green regions of the visible spectrum.

10. *Delphinidin* is an anthocyanin pigment that is found in many plants and algae. It absorbs light energy in the blue and green regions of the visible spectrum.

11. *Pelargonidin* is an anthocyanin pigment that is found in many plants and algae. It absorbs light energy in the blue and green regions of the visible spectrum.

12. *Flavonoids* are a group of pigments that include flavones, flavonols, and flavanols. They absorb light energy in the blue and green regions of the visible spectrum.

13. *Flavones* are a group of pigments that include chrysin, apigenin, and luteolin. They absorb light energy in the blue and green regions of the visible spectrum.

14. *Flavonols* are a group of pigments that include quercetin, kaempferol, and myricetin. They absorb light energy in the blue and green regions of the visible spectrum.

15. *Flavanols* are a group of pigments that include catechins, flavan-3-ols, and proanthocyanidins. They absorb light energy in the blue and green regions of the visible spectrum.

5